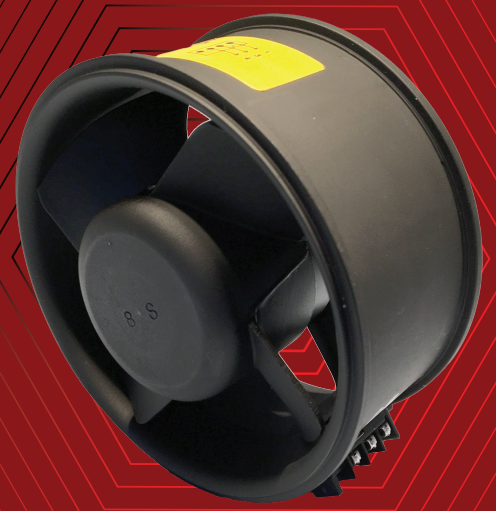
ROTRON / AMETEK®
AEROSPACE & DEFENSE

ROTRON PROPIMAX® 3
Tubeaxial Fans



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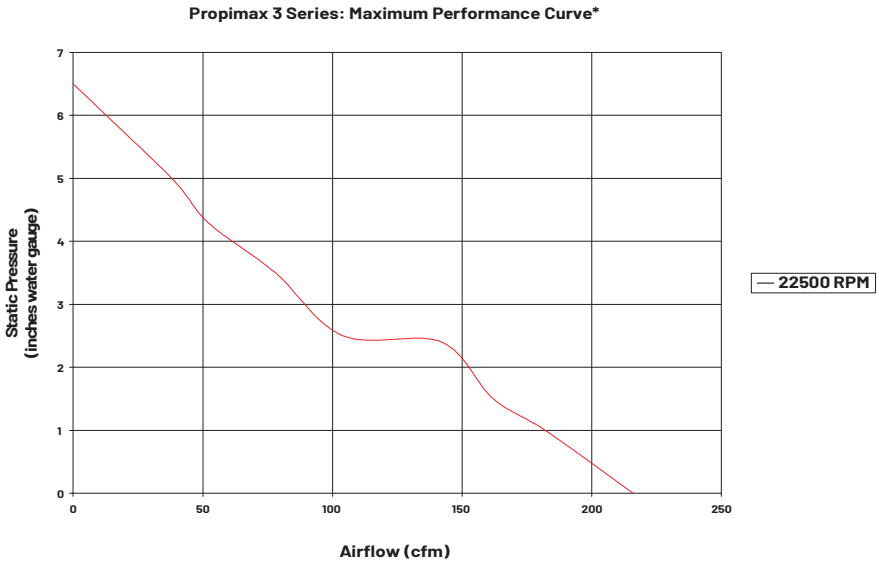
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General Tubeaxial Information

Tubeaxial Fans are integrated axial flow air moving devices in which the motor rotor is cast inside the impeller to achieve the smallest possible axial dimension. Higher aerodynamic performance and efficiencies can be achieved with these true airfoil blade designs. These fans typically operate near free delivery, but can achieve static pressures above those of Propeller Fans due to high speed operations. The Tubeaxial Fan is suitable for operation in severe environmental conditions in air, ground, and shipboard applications. They come in a variety of AC voltages and frequencies, as well as DC voltages. Hook up options include: lead wires, terminal blocks, or MS connectors. All Tubeaxial Fans are finely balanced to meet the requirements of MIL-B-23071. All units are available with an optional internal Fan Performance Sensor (FPS) and an external Low Speed Warning Device (LSWD). Some units are available with an internal Low Speed Warning Device (LSWD).

Rotron Propimax 3





[1] *Individual Performance Curve Characteristics Available Upon Request

General

- Physical envelope: 3.75" Dia. x 2.34" L [1].
- Weight: approximately 1.0 lbs.
- Die cast aluminum Venturi and Rotorprop.
- Specially designed for cooling electronics in aircraft, ground-based and shipboard applications.
- Designed for aircraft cockpit circulation, crew ventilation, and mil vehicle smoke extraction
- Custom mounting configurations, such as flanges or servo rings and synclamps, are available [2].

[1] See specific part-number drawing for complete product dimensions

[2] Please Contact the Application Engineering Department for further information

Materials and Finishes

- All aluminum components finished with a chemical conversion coating per MIL-C-5541, top coat of lusterless black enamel, color #37038, per Federal Standard 595 conforming to TT-E-489 Type B.
- Corrosion-resistant stainless steel shaft and hardware.
- Impeller runs on two-high precision, double-shielded, stainless steel ball bearings (ABEC Class 5) with an integral lubricant reservoir for a long, maintenancefree life.
- Motors have stator winding insulation which is rated for continuous duty for either Class F or Class H.

Options/Accessories

- Synclamp Mounting
- Helicoil Inserts
- Finger Guards
- Terminal Block Cover
- Custom Paints Available
- LSWD (Low Speed Warning Device)
- FPS (Fan Performance Sensor)

AC Line Powered Units [1]

- 3-phase and 1-phase permanent-split capacitor motor designs.
- Fixed speeds (performance) based on input frequency.
- Meets or exceeds the requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications.2.
- Available as a QPL product (MIL-B-2307 1/8-001)
- Max free delivery airflow of 41 CFM at 50 Hz, 56 CFM at 60 Hz, 218 CFM at 400 Hz.
- Ambient temperature range: -54 °C to 125 °C
- Acoustic levels as low as 40 dBA.

[1] Airflow, maximum ambient and acoustic levels will vary depending on design parameters

[2] Please call for further information concerning applicable U.S. military and commercial aerospace specifications

C Line Powered Units – E.C.D.C.® [1]

- Brushless permanent magnet design (Electronically Commutated DC).
- Speed (performance) fixed by input voltage.
- Meets or exceeds the requirements of MIL-B-28873 and other applicable U.S. military and commercial aerospace specifications 2.
- Max free delivery airflow of 280 CFM
- Ambient temperature range: -40 °C to 85 °C.
- Acoustic levels as low as 47 dBA.

Optional DC-AC Inverters and AC-AC Converters for AC Powered Models [1]

BATAC® Inverter Driven Units

- AC square wave fans driven from a DC power source through a BATAC® Inverter.
- Low cost alternative when multiple fans are used in a single application or area.
- Allows for greater than 100 VDC input voltage.

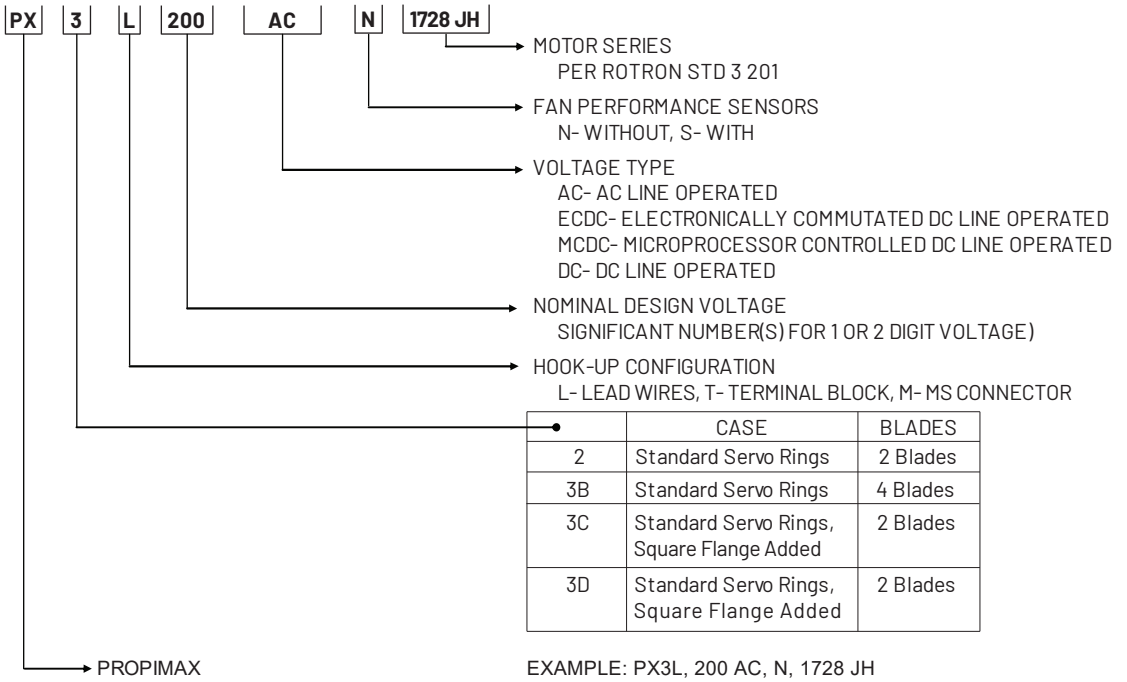
[1] See Accessories: Power Conversion

DELTAC® Converter Driven Units

- DELTAC® converters allow high frequency (typically 400 Hz) fans to be driven by variable frequency (typically 360-800 Hz) power or low frequency 50/60 Hz power to obtain the higher frequency performance.

Unit Description Key

The unit description key is for reference only and should not be confused with a part number. While most units are custom configurations, not all variations of the key shown below are possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



	CASE	BLADES
2	Standard Servo Rings	2 Blades
3B	Standard Servo Rings	4 Blades
3C	Standard Servo Rings, Square Flange Added	2 Blades
3D	Standard Servo Rings, Square Flange Added	2 Blades

EXAMPLE: PX3L, 200 AC, N, 1728 JH

* "X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

Ordering Information

When ordering, please specify the specific Rotron part number listed on the following model table. Further ordering information, based on the configuration and motor series,may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.

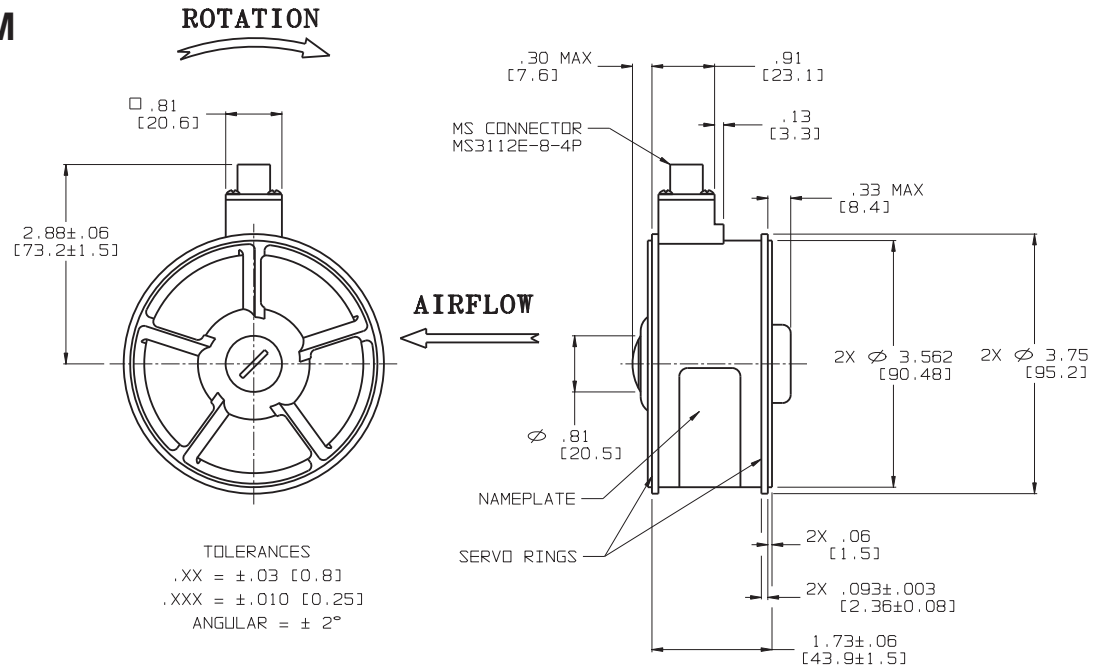
Standard Product Offering of AC Line Powered Models

Part #	Prod. Desc.	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (C)	Weight	Volts	Phase	Hz	Capacitor	Data	Features
026973000	PX3T 409ZH	218	6.2	21750	109	1.0	100	1.0	115	1	400	2.5/220	A541-8	TERMINALS
034215000	PX3M 470JH	214	7.0	22500	77	0.3	125	1.0	115	3	400	N/A	A541-10	CONNECTOR
026974000	PX3T 341JH	212	6.4	22500	83	0.3	125	1.0	200	3	400	N/A	A541-4	TERMINALS
020845000	PX3BT 593JH	188	3.1	11010	61	0.6	125	1.0	115	3	400	N/A	A292-14	TERMINALS
026975000	PX3BT 754DH	186	2.9	11000	64	0.6	115	1.0	115	1	400	2.0/220	A285-9	TERMINALS
026976000	PX3BT 473JH	182	2.8	11000	63	0.3	125	1.0	200	3	400	N/A	A285-6	TERMINALS
022033000	PX3BT 980XH	158	1.6	9200	105	0.9	100	1.0	115	1	400	1.0/220	A285-9	TERMINALS
026981000	PX3BT 387JH	140	1.2	8200	68	0.3	125	1.0	200	3	400	N/A	A202-29	TERMINALS
033417000	PX3BT 748WH	125	1.4	7300	33	0.4	125	1.0	115	3	400	N/A	A292-1	TERMINALS
035687000	PX3BL 815WH	124	1.3	7300	33	0.2	125	1.0	200	3	400	N/A	A296-35	LEADS, FPS
034606000	PX3BL 718ZH	117	1.2	6975	29	0.3	125	1.0	115	1	400	0.25/220	A701-12	LEADS, FPS
034676000	PX3BL 400ZH	100	0.6	5950	39	0.3	125	1.0	115	1	400	0.5/220	A152-6	LEADS, FPS
041292000	PX3BT 706JH	88	0.5	5350	21	0.1	125	1.0	200	3	400	N/A	A294-31	TERMINALS, FPS
026979000	PX3BT 805ZH	53	0.3	3235	24	0.2	100	1.0	115	1	60	0.25/220	A325-28	TERMINALS
026979000	PX3BT 805ZH	53	0.2	3120	26	0.2	100	1.0	115	1	400	0.25/220	A325-28A	TERMINALS
021013000	PX3T 973JH	1	2.1	11860	36	0.3	100	1.0	200	3	400	N/A	A63-34	TERMINALS

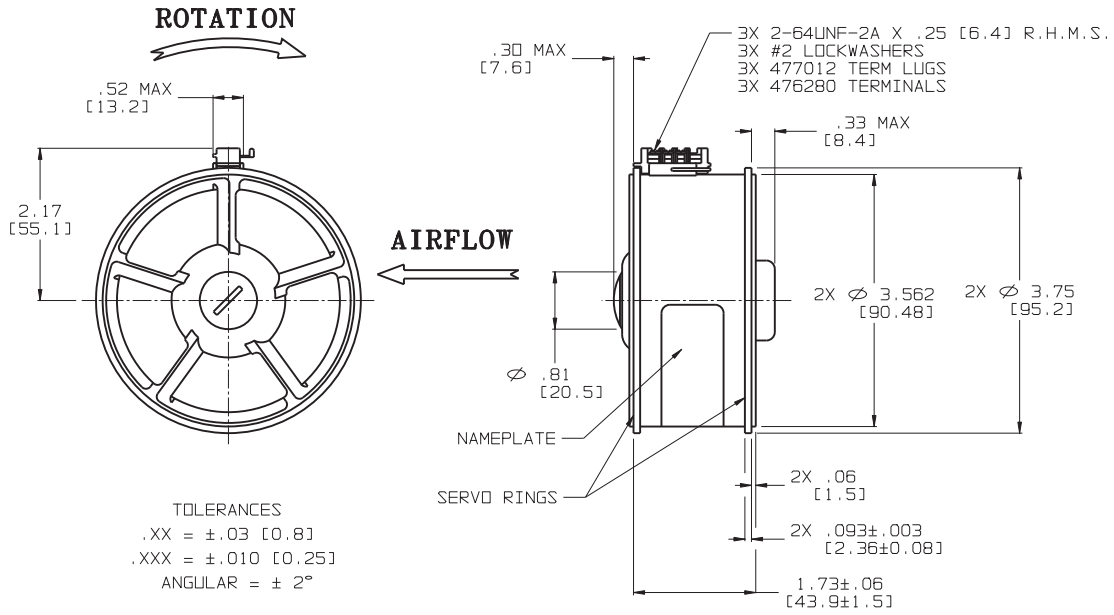
Standard Product Offering of DC Line Powered Models

Part #	Product Description	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (C)	Weight	Volts	Airflow Source Data	Features
011581000	PX3BS 3369XF	260	5.9	15000	153	6.0	85	1.0	28	A475-1	FPS, SQUARE FLANGE
011680000	PX3BT 3451SF	164	2.3	10000	50	1.6	85	1.0	28	A564-25B	TERMINALS, FPS
011097000	PX3BT 1987SF	121	1.4	7500	20	0.8	100	1.0	28	A279-17B	TERMINALS, FPS

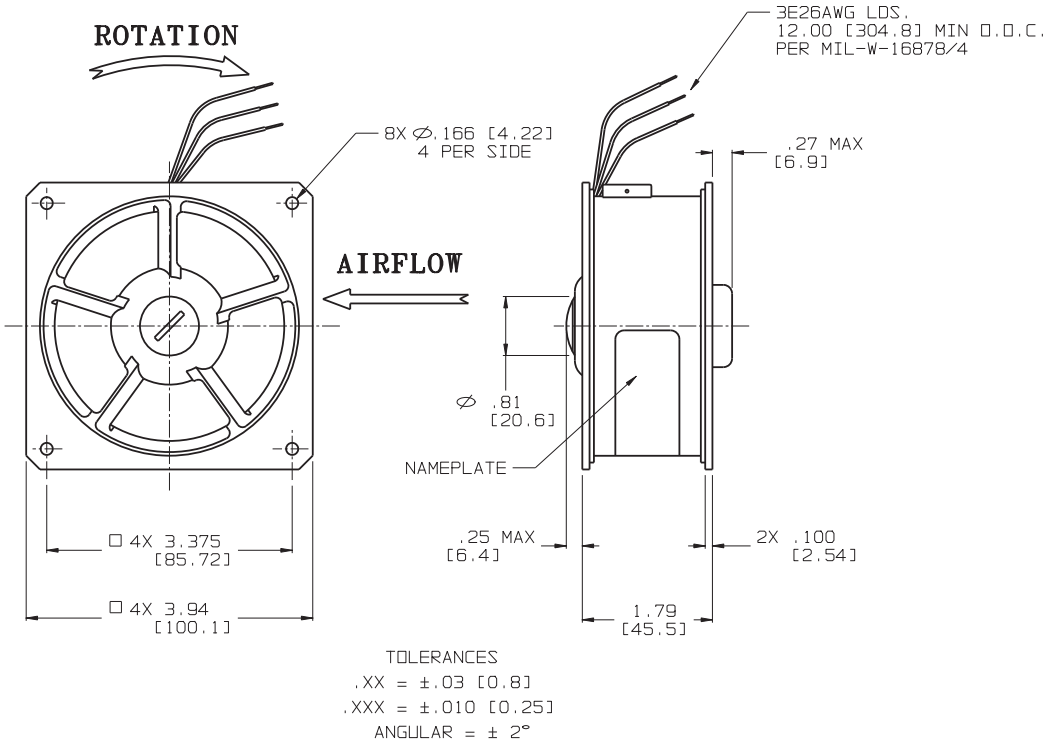
PX3M


ROTATION
□ .81
[20.6]
2.88±.06
[73.2±1.5]
AIRFLOW
.30 MAX
[7.6]
.91
[23.1]
MS CONNECTOR
MS3112E-8-4P
.13
[3.3]
.33 MAX
[8.4]
2X ∅ 3.562
[90.48]
2X ∅ 3.75
[95.2]
∅ .81
[20.5]
NAMEPLATE
SERVO RINGS
2X .06
[1.5]
2X .093±.003
[2.36±0.08]
1.73±.06
[43.9±1.5]
TOLERANCES
.XX = ±.03 [0.8]
.XXX = ±.010 [0.25]
ANGULAR = ± 2°

PX3T

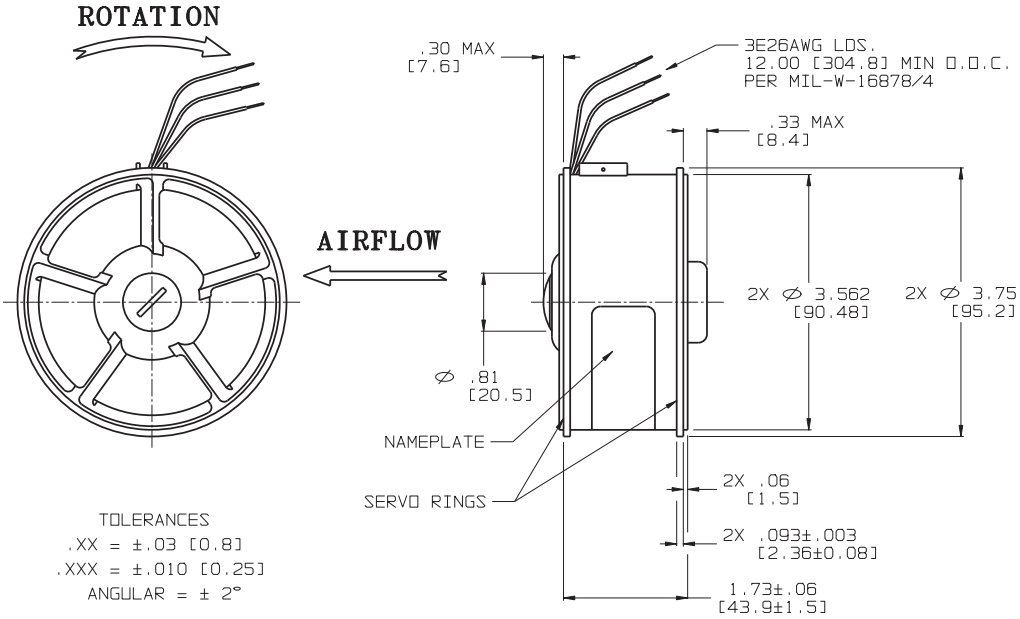

ROTATION
.52 MAX
[13.2]
2.17
[55.1]
AIRFLOW
.30 MAX
[7.6]
3X 2-64UNF-2A X .25 [6.4] R.H.M.S.
3X #2 LOCKWASHERS
3X 477012 TERM LUGS
3X 476280 TERMINALS
.33 MAX
[8.4]
2X ∅ 3.562
[90.48]
2X ∅ 3.75
[95.2]
∅ .81
[20.5]
NAMEPLATE
SERVO RINGS
2X .06
[1.5]
2X .093±.003
[2.36±0.08]
1.73±.06
[43.9±1.5]
TOLERANCES
.XX = ±.03 [0.8]
.XXX = ±.010 [0.25]
ANGULAR = ± 2°

PX3DL



PROPIMAX 3 – AC & DC*

PX3L



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Specifications subject to change without notice